

AMENDMENTS TO THE CLAIMS

This listing of claims will replace all prior versions and listings of claims in the application:

LISTING OF THE CLAIMS

Claims 1–43 (*Cancelled*).

44. (*New*) A method for reducing the glucoamylase activity in a milk clotting composition comprising the steps of:

- (i) providing a medium having a pH of 2.0 or higher that comprises chymosin activity and glucoamylase activity, wherein the medium having a pH of 2.0 or higher is derived from the cultivation of an organism that is a bacterial species, a yeast species, or a species of filamentous fungi, wherein the organism comprises a gene for encoding chymosin that is derived from a bovine or *Camelidae* species,
- (ii) lowering the pH of said medium having a pH of 2.0 or higher to between 1.0 and 1.8 by addition of lactic acid, acetic acid, propionic acid, or citric acid, and
- (iii) subjecting said medium to a pH in the range of 1.0 to 1.8 for a period of time sufficient to inactivate at least 50% of said glucoamylase activity while maintaining at least 75% of said chymosin activity.

45. (*New*) The method according to claim 44, wherein at least 90% of said glucoamylase activity is inactivated.

46. (*New*) The method according to claim 44, wherein the medium having a pH of 2.0 or higher is a medium derived from the cultivation of an organism that during its cultivation produces said chymosin activity and said glucoamylase activity.

47. (*New*) The method according to claim 44, wherein the bacterial species is a gram negative bacterial species or a gram positive species.

48. (*New*) The method according to claim 46, wherein the bacterial species is *E. coli* or *Bacillus*.

49. (New) The method according to claim 44, where the yeast species is *Saccharomyces cerevisiae*, a methylotrophic yeast species or a *Kluyveromyces* species.
50. (New) The method according to claim 44, wherein the species of filamentous fungi is an *Aspergillus* species, a *Cryphonectria* species, a *Fusarium* species, a *Rhizomucor* species or a *Trichoderma* species.
51. (New) The method of claim 49, wherein said *Aspergillus* species is *Aspergillus niger* var. *awamori*.
52. (New) The method according to claim 44, wherein the medium having a pH of 2.0 or higher is subjected to a pH in the range of 1.5 to 1.8.
53. (New) The method according to claim 44, wherein the medium having a pH of 2.0 or higher is subjected to a pH between 1.7 to 1.8.
54. (New) The method according to claim 44, wherein the medium having a pH of 2.0 or higher is subjected to a pH of approximately 1.8.
55. (New) The method according to claim 44, wherein said period of time is in the range of 0.1 minutes to 48 hours.
56. (New) The method according to claim 44, wherein the yeast species is selected from *Pichia pastoris* and *Kluyveromyces lactis*.
57. (New) The method of claim 44, wherein the gene encoding chymosin is derived from *Camelus dromedarius*.
58. (New) The method of claim 44, wherein at least 85% of the chymosin activity is maintained in step (iii).
59. (New) The method of claim 44, wherein the gene encoding chymosin is derived from a bovine species.
60. (New) A method for reducing the glucoamylase activity in a milk clotting composition comprising the steps of:

- (i) providing a medium having a pH of 2.0 or higher that comprises chymosin activity and glucoamylase activity, wherein the medium having a pH of 2.0 or higher is derived from the cultivation of an organism that is a bacterial species, a yeast species, or a species of filamentous fungi, wherein the organism comprises a gene for encoding chymosin that is derived from a bovine or *Camelidae* species,
- (ii) lowering the pH of said medium having a pH of 2.0 or higher to between 1.0 and 1.8 by addition of an inorganic acid, and
- (iii) subjecting said medium to a pH in the range of 1.0 to 1.8 for a period of time sufficient to inactivate at least 50% of said glucoamylase activity while maintaining at least 75% of said chymosin activity.

61. (New) The method according to claim 60, wherein at least 90% of said glucoamylase activity is inactivated.

62. (New) The method according to claim 60, wherein the medium having a pH of 2.0 or higher is a medium derived from the cultivation of an organism that during its cultivation produces said chymosin activity and said glucoamylase activity.

63. (New) The method according to claim 60, wherein the bacterial species is a gram negative bacterial species or a gram positive species.

64. (New) The method according to claim 63, wherein the bacterial species is *E. coli* or *Bacillus*.

65. (New) The method according to claim 60, where the yeast species is *Saccharomyces cerevisiae*, a methylotrophic yeast species or a *Kluyveromyces* species.

66. (New) The method according to claim 60, wherein the species of filamentous fungi is an *Aspergillus* species, a *Cryphonectria* species, a *Fusarium* species, a *Rhizomucor* species or a *Trichoderma* species.

67. (New) The method of claim 66, wherein said *Aspergillus* species is *Aspergillus niger* var. *awamori*.

68. (New) The method according to claim 60, wherein the medium having a pH of 2.0 or higher is subjected to a pH in the range of 1.5 to 1.8.
69. (New) The method according to claim 60, wherein the medium having a pH of 2.0 or higher is subjected to a pH between 1.7 to 1.8.
70. (New) The method according to claim 60, wherein the medium having a pH of 2.0 or higher is subjected to a pH of approximately 1.8.
71. (New) The method according to claim 60, wherein said period of time is in the range of 0.1 minutes to 48 hours.
72. (New) The method according to claim 60, wherein the yeast species is selected from *Pichia pastoris* and *Kluyveromyces lactis*.
73. (New) The method of claim 60, wherein the gene encoding chymosin is derived from *Camelus dromedarius*.
74. (New) The method of claim 60, wherein at least 85% of the chymosin activity is maintained in step (iii).
75. (New) The method of claim 60, wherein the gene encoding chymosin is derived from a bovine species.
76. (New) The method of claim 60, wherein the inorganic acid is hydrochloric acid, phosphoric acid, or sulfuric acid.
77. (New) The method of claim 60, wherein the gene encoding chymosin is derived from *Camelus dromedarius*.